

Application No. 09/744,662  
Amendment "D" dated October 31, 2005  
Reply to Office Action mailed September 27, 2005

### REMARKS

Applicants respectfully request reconsideration and allowance of the above-identified patent application. Claims 36-71 remain pending, of which claims 36 and 66 are independent method claims. As indicated above, claims 36 and 66 have been amended by this paper.

Initially, Applicants note with appreciation the Examiner's consideration of the documents submitted in the Supplemental Information Disclosure Statement filed September 2, 2005.

The Office Action rejects claims 36, 38-40, 47-54, 56-59, 63, and 66-67 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,819,004 to Azadegan et al. (*Azadegan*) in view of U.S. Patent No. 5,892,535 to Allen et al. (*Allen*). Claims 37 and 41-46 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Azadegan* and *Allen* in further view of U.S. Patent No. 5,926,569 to Nickerson (*Nickerson*). Claims 55 and 68 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Azadegan* and *Allen* in further view of U.S. Patent No. 6,049,316 to Nolan et al. (*Nolan*). Claim 64 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Azadegan* and *Allen* in further view of U.S. Patent No. 6,175,650 to Sindhu et al. (*Sindhu*). Claim 69 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Azadegan* and *Allen* in further view of U.S. Patent No. 5,617,333 to Oyamada et al. (*Oyamada*). Claim 70 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Azadegan* and *Allen* in view further view of U.S. Patent No. 5,619,591 to Tsang et al. (*Tsang*). Claims 60-62, 65, and 71 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Azadegan* and *Allen* in further view of U.S. Patent No. 6,003,030 to Kenner et al. (*Kenner*).<sup>1</sup> For at least the following reasons, Applicants respectfully traverse these grounds of rejection.

Applicants' invention, as claimed for example in independent method claim 36, relates to generating a compressed video stream of a user interface in order to provide a client with remote access to computer program(s) running at a server. The method includes: executing a computer program at the server, the computer program providing a plurality of display commands which represent a user interface for the program; drawing at least a portion of the user interface for the computer program on a virtual display at the server; prior to compressing the user interface for remote display at the client, generating a plurality of

<sup>1</sup> Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

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quantized transform coefficients from the display commands, wherein one or more different quantized transform coefficients are generated for different display commands; creating a compressed video stream of the user interface by utilizing the coefficients for said different display commands; sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream as opposed to the plurality of display commands provided by the program; receiving user input from the client that is directed to the user interface; and based on the received user input from said client, sending a second compressed video stream to said client for remotely displaying a modified version of said user interface of said computer program.

Similarly, Applicants' invention, as claimed for example in independent method claim 66, also relates to generating a compressed video stream of a user interface in order to provide a client with remote access to a computer program running at a server. The method includes: executing a computer program at the server, the computer program providing a plurality of display commands which represent a user interface for the computer program; drawing at least a portion of the user interface for the computer program on a virtual display at the server; prior to compressing the user interface for remote display at the client, setting at least one compression parameter to different values for different ones of the display commands; creating a compressed video stream of said user interface by utilizing the at least one compression parameter for said commands; sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream as opposed to the plurality of display commands provided by the program; and receiving user input from the client that is directed to the user interface.

Applicants respectfully submit that the combination of *Azadegan* and *Allen* do not render independent claims 36 and 66 unpatentable for at least the reason that the combination does not disclose or suggest each and every element of these claims.<sup>2</sup> For example, the combination of *Azadegan* and *Allen* does not disclose or suggest executing a computer program at a server, the computer program providing a plurality of display commands which represent a user interface for the computer program; drawing at least a portion of the user interface for the computer program on a virtual display at the server; creating a compressed video stream of the user interface by utilizing the coefficients and/or compression

<sup>2</sup> In order to establish a *prima facie* case of obviousness, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2143 (emphasis added). During examination, the pending claims are given their broadest reasonable interpretation, i.e., they are interpreted as broadly as their terms reasonably allow, consistent with the specification. MPEP §§ 2111 & 2111.01.

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parameter(s) of the commands; and sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream, as recited in claims 36 and 66. Further, the combination of *Azadegan* and *Allen* does not disclose or suggest that based on the received user input from the client, a second compressed video stream is sent to the client for remotely displaying a modified version of the user interface of the computer program, as recited, *inter alia*, in claim 36.

As noted in previous communications, *Azadegan* discloses a method and system for manually changing the quality of portions of video frames after the frames have been previously encoded. Abstract. After the input video is encoded into a compressed digital format, such as MPEG, the video is displayed and a user is allowed to enter commands indicating quality changes for regions within one or more frames. Col. 34, ll. 12-22; Fig. 21. Once the regions are defined and user defined priorities are entered, new quantizer values are estimated or determined based on the priority value and the prior quantizer value. Col. 36, ll. 34-41; Figure 22. The frame(s) of video are then digitally re-encoded and inserted into the digitally encoded data stream in place of the previously encoded data. Abstract.

*Azadegan*, however, does not disclose or suggest executing a computer program at a server, the computer program providing a plurality of display commands which represent a user interface for the computer program; drawing at least a portion of the user interface for the computer program on a virtual display at the server; creating a compressed video stream of the user interface; sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream; and based on the received user input from the client, sending a second compressed video stream to the client for remotely displaying a modified version of the user interface of the computer program. In fact, *Azadegan* is silent with respect to a server and video compression of a user interface for a computer program.

Nevertheless, the Office Action cites col. 34, ll. 19-22, col. 36, ll. 34-41, col. 76, ll. 16-22, and element 462 in fig. 20 as allegedly disclosing: executing a program, the program providing a plurality of display commands which represent a user interface for the program; prior to compressing, generating a plurality of quantized transform coefficients from said display commands, wherein one or more different quantized transform coefficients are generated for different display commands; and creating a compressed video stream from the plurality of display commands utilizing the coefficients. Although these cited sections of *Azadegan* at most disclose re-encoding of user modified video as described above, *Azadegan*

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does not disclose or suggest creating a compressed video stream of the user interface, nor does *Azadegan* disclose or suggest a server/client connection.

More specifically, *Azadegan* provides a user interface to assign priorities for portions of a video frame, which is recompressed using newly assigned quantizer values. *Azadegan*, however, does not disclose or suggest that the user interface itself is compressed as a video stream. In fact, as noted by the element 462 in fig. 20, *Azadegan* "re-encodes video using new quantizer values", but does not encode the *user interface* generated by the computer program used to modify the video. In addition, as noted by the Office Action, *Azadegan* does not disclose or suggest a client/server connection over a network. As such, *Azadegan* cannot possibly disclose or suggest executing a computer program at a server, the computer program providing a plurality of display commands which represent a user interface for the computer program; drawing at least a portion of the user interface for the computer program on a virtual display at the server; creating a compressed video stream of the user interface; and sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream, as recited in claims 36 and 66. Further, *Azadegan* does not disclose or suggest that based on received user input from the client, that a second compressed video stream is sent to the client for remotely displaying a modified version of the user interface of the computer program, as now recited in claim 36.

Noting some of the deficiencies of *Azadegan*, the Office Action cites *Allen*. *Allen* discloses a flexible and configurable system for distributing media (or television programming) to one or more distribution networks. Abstract. More specifically, *Allen* provides a broadcasting system that allows for ad insertion at "break" intervals of either national or local video television programming. See e.g., col. 17, l. 23 through col. 18, l. 67. *Allen* also provides for broadcasting compositing temporally related video frames when, for example, displaying a trailer of a movie from national video feed with an overlay of playtimes of that particular movie at local theaters. See e.g., col. 19 ll. 1-36. In addition, *Allen* also discloses a near video-on-demand (NVOD) feature that allows a subscriber to view availability and channel scheduling when ordering a particular program. See e.g., col. 19, l. 38 through col. 20, l. 2.

Applicants respectfully submit, however, that *Allen* does not disclose or suggest executing a computer program at a server, the computer program providing a plurality of display commands which represent a user interface for the computer program; drawing at least a portion of the user interface for the computer program on a virtual display at the

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server; creating a compressed video stream of the user interface; and sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream. Further, *Allen* does not disclose or suggest that based on the received user input from the client, sending a second video stream to the client for remotely displaying a modified version of the user interface of the computer program. Nevertheless, the Office Action cites various sections of *Allen* as allegedly disclosing portions of the above embodiments. For at least the following reasons, however, Applicants respectfully disagree with the Office Actions interpretation of what *Allen* discloses or suggests.

First, in response to Applicants' previous arguments, the Office Action cites fig. 2 of *Allen* as allegedly disclosing "the use of a media server that is connected over communication networks with remote access at an optional remote media server for running a program at the server." The Office Action then concludes that *Allen* thus teaches "the use of a server connected [to] a client over a network that provides the client with remote access to a program running at the server." Applicants note, however, that the "optional remote" server referenced by the Office Action does not execute a computer program that provides a plurality of display commands which represent a users interface for the computer program. In fact, as noted in col. 17, ll. 8-9, "[t]he remote media server 222 [merely] provides additional storage for compressed media and scheduling data." *Allen*, however, makes no mention of running a computer program that provides a user interface at the optional server (or any other server) that will subsequently be compressed into a video stream for providing a client remote access thereto.

Second, the Office Action cites element 204 of fig. 2 of *Allen* as allegedly "drawing at least a portion of the user interface for the program on a virtual display at the server." Applicants respectfully note that, however, that the server interface unit 204 of fig. 2 simply acts a communication link between the local media server and one or more distribution network interface(s), but in no way acts as a virtual display. For example, in col. 16, ll. 37-44 of *Allen* it states that the server interface unit 204 simply "buffers the files of compressed media (e.g., video), communicates the buffered files of compressed media data to appropriate...distribution network interface units 206 upon request..., and communicates control data to the local media server 202...." *Allen*, however, does not disclose or suggest drawing a portion of a user interface for a computer program at the server interface unit 204.

Third, in response to Applicants' previous arguments, the Office Action cites col. 16, ll. 16-60 of *Allen* as allegedly disclosing in fig. 2, "the use of remote display of the user

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interface in that the media server stores MPEG-2 data, VIDEO CYPHER-2 and other types of compressed media, and that the compressed media and programming information can be transmitted to the subscriber." The Office Action then concludes that *Allen* thus teaches "sending said compressed video stream to said client for remotely displaying the user interface at the client as a video stream as opposed to the plurality of display commands provided by the program." Applicants respectfully note, however, that these cited sections of *Allen* disclose (at most) running programs at either the local or remote media servers for determining what already compressed video data should be sent to subscribers at certain time intervals (e.g., determining what compressed local or remote ads to send during breaks in broadcasted television programming). *Allen* does not disclose or suggest, however, that these servers generate programs with display commands which represent a user interface for the program. Nevertheless, assuming for arguments sake only that *Allen* does store compressed display commands as alleged by the above cited statements from the Office Action, this is not the same as creating a compressed video stream of a user interface for a computer program by utilizing coefficients and/or compression parameters for different display commands.

Based on the foregoing arguments, Applicants respectfully submit that *Allen* does not disclose or suggest executing a computer program at a server, the computer program providing a plurality of display commands which represent a user interface for the computer program; drawing at least a portion of the user interface for the computer program on a virtual display at the server; creating a compressed video stream of the user interface by utilizing coefficients and/or compression parameters for commands; and sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream, as recited in claims 36 and 66. Further, *Allen* does not disclose or suggest that based on received user input from the client, sending a second compressed video stream to the client for remotely displaying a modified version of the user interface of the computer program, as recited in claim 36.

Accordingly, *Allen* does not rectify those deficiencies noted above with regards to *Azadegan*. In other words, the combination of *Azadegan* and *Allen* does not disclose or suggest each and every element of claims 36 and 66, and Applicants respectfully request withdrawal of these grounds of rejection.

Based on at least the foregoing reasons, Applicants respectfully submit that the cited prior art fails to make obvious Applicants' invention, as claimed for example, in independent claims 36 and 66. Applicants note for the record that the remarks above render the remaining

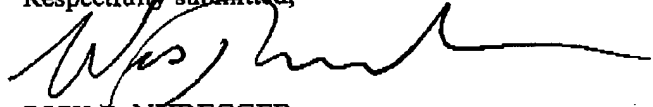
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rejections of record for the independent and dependent claims moot, and thus addressing individual rejections or assertion with respect to the teachings of the cited art is unnecessary at the present time, but may be undertaken in the future if necessary or desirable, and Applicants reserve the right to do so.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance, and notice to this effect is earnestly solicited. Should any question arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at +1.801.533.9800.

Dated this 31<sup>st</sup> day of October, 2005.

Respectfully submitted,



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